

Notice of Allowability

Application No.

10/612,978

Examiner

Paulos M. Natnael

Applicant(s)

JEONG ET AL.

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication received 7-7-03.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

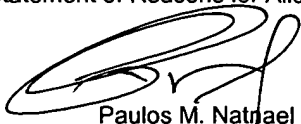
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Paulos M. Natnael
Primary Examiner
Art Unit 2614

DETAILED ACTION

Allowable Subject Matter

1. Claims **1-13** are allowed.
2. The following is an examiner's statement of reasons for allowance: the prior art fails to disclose the combination of limitations comprising "an automatic gain control apparatus for video signal comprising: a RF amplifier for receiving signals of a frequency band from a predetermined channel, and amplifying a high frequency signal among those received signals and converting the high frequency signal into an intermediate frequency (IF) signal; an IF amplifier for receiving the intermediate frequency signal, and amplifying the signal by a predetermined amplifying rate; a demodulator for demodulating the IF signal from the IF amplifier, and outputting a reproduced video signal; an RF automatic gain control apparatus and an IF automatic gain control apparatus for receiving the video signal reproduced by the demodulator, and controlling a gain of the RF amplifier and a gain of the IF amplifier according to the reproduced video signal, respectively; and a RF automatic gain control compensating unit for detecting a level of an IF input signal provided to the IF amplifier, checking whether the detected level of the IF input signal meets a reference level, controlling for raising a voltage of the RF automatic gain control apparatus if the detected level of the IF input signal is lower than the reference level, and controlling for lowering a voltage of the RF automatic gain control apparatus if the detected level of the IF input signal is higher than the reference level, as in claim 1; and,

An adjusting method of an automatic gain control apparatus for a video signal for being inputted with a signal, amplifying the input signal through a RF amplifier and outputting as an IF input signal to an IF amplifier, outputting a video signal which is reproduced based on the IF input signal, and controlling a gain of the RF amplifier and of the IF amplifier based on the reproduced video signal through a RF automatic gain control apparatus and an IF automatic gain control apparatus, respectively, the adjusting method comprising the steps of (a) determining whether or not the reproduced video signal meets a predetermined output reference range, (b) if it is determined that the reproduced video signal does not meet the predetermined output reference range in the step (a), determining whether or not the reproduced video signal exceeds the predetermined output reference range;(c) if it is determined that the reproduced video signal does not exceeds the predetermined output reference range in the step (b), determining whether or not an IF input signal level of the IF input signal is identical to a reference level that corresponds to the output reference range; (d) if it is determined that the IF input signal level is not identical to the reference level in the step (c), determining if the IF input signal level is greater or smaller than the reference level; and (e) if it is determined that the IF input signal level is greater than the reference level in the step (d), lowering an AGC constant of the RF automatic gain control apparatus, thereby making an output voltage lower compared with an input voltage of the RF automatic gain control apparatus, as in claim 8.

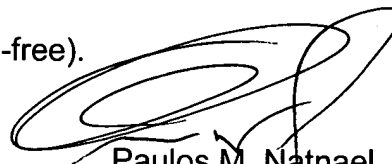
Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Koizumi U.S. 6,965,656 teaches automatic gain control method with detection and smoothing circuit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (571) 272-7354. The examiner can normally be reached on 9am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paulos M. Natnael
Primary Examiner
Art Unit 2614

March 4, 2006